



## **FINAL KY FACE 95KY11001**

Date: 16 November 1995

### **Subject: Log Rolls Off Truck During Unloading and Strikes Logger**

#### **SUMMARY**

A 52-year-old male logger was killed when he was struck by a log rolling off of his truck during the unloading process. The victim was a self-employed logger who had at least 25 years of experience. He was using the family-owned truck to haul a load of logs to the mill. The vertical stakes on the flatbed truck were approximately three feet high with the logs stacked another 3-4 feet above the stakes. He arrived at the mill at approximately 9am and began the unloading procedure. One of the chains that secured the load of logs was in two pieces and needed to be unhooked on both sides of the truck. After unhooking the chains on one side of the truck, the victim walked to the other side of the vehicle to unfasten the chain attached on that side when a log fell off of the stack, striking the victim on the back of the head and pinning him on the ground. The endloader driver for the mill was a witness to the incident. The victim was transported to the hospital by emergency medical personnel and pronounced dead at 10:30am. In order to prevent similar occurrences, FACE investigators recommend:

- Height of the stack of logs should not exceed the height of the vertical stakes on the truck
- An unbinding cage should be used at the mill during unloading procedures to protect the logger from falling logs.
- Written policies should be in place regarding unloading procedures for loggers at the mill and the policies should be enforced by mill owners
- Loggers should attend the Master Logger Program for education regarding logging standards and safety procedures
- Lawmakers should consider initiating regulations to limit height of the stack of logs on vehicles using public roadways.

#### **INTRODUCTION**

On 13 October 1995, a 52-year-old logger was killed when he was struck by a log falling from his truck. Kentucky FACE was notified of the incident on 15 October and an investigation was then initiated. A FACE investigator traveled to the site of the incident on 26 October. Interviews were held with the county coroner, the witness, and other loggers who knew the victim. The area where the truck was unloaded at the lumberyard was photographed and measured. The log truck was unavailable for inspection, however photographs of the truck taken by the county coroner were reviewed and photocopies obtained. A copy of the death certificate was obtained. One of the managers of the lumber company was interviewed via telephone at a later time.

#### **INVESTIGATION**

The lumber company where the incident occurred has been in business for three years, although the manager has been involved in logging all his life. The company purchases logs from local loggers and employs twelve workers. No written guidelines regarding unloading procedures are in place at the company for loggers doing business there, however the company does have safety policies for its own employees.

The victim was a 52-year-old male who had been a self-employed, full-time logger all his life. Other loggers who knew him expressed that he was an experienced and conscientious worker. On the day of the incident he was working alone, hauling logs for his brother-in-law, using a family-owned truck. The vertical stakes on the flatbed truck were about 36-40 inches high and the logs were stacked approximately 3-4 feet higher than the stakes. One of the chains securing the load was in two pieces and needed to be unfastened on both sides of the truck; in usual practice, one length of chain that is long enough to be secured in one place is used, allowing the driver to unfasten the load on one side of the truck.

The victim hauled the load of logs to the lumberyard and arrived about 9am. The area where the logs are unloaded is level packed dirt and relatively smooth. The endloader driver was in the process of unloading a nearby truck when the victim began to unhook the chains on the trailer. The witness related that the victim appeared to be in no hurry as he unfastened the chains on the driver's side, then walked around the back of the trailer to unfasten the remaining chain on the passenger side. As he bent over to unhook the chain, the load shifted, causing one of the logs on top to push off one of the logs on the edge of the stack. The log struck the victim on the back of the head and pinned him to the ground. Emergency medical personnel responded to the scene and transported the victim to the local hospital where he was pronounced dead at 10:30am.

### CAUSE OF DEATH

On the death certificate the cause of death is given as head and chest injuries due to being struck by a log that fell from his truck. No autopsy was performed.

### RECOMMENDATIONS/DISCUSSION

**Recommendation #1:** Height of the stack of logs should not exceed the height of the vertical stakes on the truck. (APA Safety Alert 93-S-46)

**Discussion:** In this case, the logs on the truck were stacked approximately twice as high as the stakes. Raising the height of the stakes or lowering the height of the stack would decrease the risk of a log falling off the stack unexpectedly.

**Recommendation #2:** An unbinding cage should be used at the mill during unloading procedures to protect the logger from falling logs.

**Discussion:** The steel unbinding cage made by Stanford Timber Products in East Bernstadt Kentucky is 39 ft. long, 4 ft. wide, and 8 ft. high. To begin the unloading process at the mill, the driver parks the log truck beside the unbinding cage, exits the cab, and enters the cage. The driver unfastens the chains/binders using a metal pole with a curved hook and pulls the binders off from within the cage. Steel stakes on top of the cage prevent falling logs from rolling beyond the area protected by the cage. The entire procedure takes place with the driver safely within the unbinding cage. (APA Technical Release 95-R-35)

**Recommendation #3:** Written policies should be in place regarding unloading procedures for loggers at the mill and the policies should be enforced by mill owners

**Discussion:** Written guidelines for unloading procedures at the mill would help ensure that the logs are being

unloaded properly, providing a safe work environment for both the loggers and the employees of the mill.

**Recommendation #4:** Loggers should attend the Master Logger Program for education regarding logging standards and safety practices.

**Discussion:** Loggers should be aware of proper procedures and safety practices to ensure a safe work environment. For information about the Master Logger Program, contact Larry Lowe at the Kentucky Department of Natural Resources (502-564-4496).

**Recommendation #5:** Lawmakers should consider initiating regulations to limit the height of the stack of logs on vehicles traveling on public roadways.

**Discussion:** Loggers operating as independent contractors may not be bound by OHS regulations and in an effort to decrease the risk of injury during unloading at a sawmill, limiting log stack height could be regulated by transportation laws. Because transportation of logs to a mill takes place via public roadways, others traveling on roadways are at risk when log height exceeds the stakes due to shifting of the logs and potential failure of the binders. Enforcement based in transportation laws rather than occupational safety regulations may reduce the risk of fatalities occurring at sawmills and reduce the hazard to other vehicles on the road.

## REFERENCES

American Pulpwood Association, Inc. (APA), Safety Alert 93-S-46, December 1993.

American Pulpwood Association, Inc. (APA), Technical Release 95-R-35, September 1995.